Purpose and Need for Action

The purpose of this project is restoration related: 1) maintaining or restoring the existing values and ecosystem services that a riparian environment provides through improving the hydrological function of the Little Deschutes River to benefit the unique habitats found adjacent to the river. 2) Maintaining or enhancing recreational experiences of hunting, fishing, and camping, with a sustainable road system that provides access while increasing wildlife security and reduces sedimentation to the river.

The purpose provides for the need for action that are inter-related to the purposes of the project.

1. *There is a need to restore the unique habitats along the Upper Little Deschutes River. This includes meadows, fens, fish spawning habitat, and Oregon spotted frog habitat by reconnecting the relic oxbows*[1] *back into the current hydrologic system.*
2. *There is a need to enhance sustainable recreational through removal of resource damaging dumpsites, remove disperse sites that are degrading water quality, restore riparian areas adjacent to campsites that have overuse and close disperse sites that lead to resource damage.*
3. *There is a need to provide a sustainable transportation system to accommodate public access throughout the planning area while increasing wildlife security and reducing the resource damage, vegetation removal, and sedimentation into the river.*

Proposed Action - Refer to Large Map

Riparian enhancement and restoration would include:

1. Instream work by excavator: placement of tree structures, reshaping connections to side channels, digging overwintering ponds in side channels. Project work would be at select sites along nearly 10 miles (16 km) of stream channel.
    a. Trees for instream structures will be taken within 300' of the placement point. Trees would be tipped over with an excavator and moved to the placement site. Lodgepole pine trees encroaching on the meadow would also be a source for instream structures.
    b. Reshaping an unauthorized water diversion from the point of diversion back to the river. This section of ditch would be contoured to match natural channel dimensions in the project area. The remaining section would be decommissioned and rehabilitated with riparian vegetation.
        i. Rehabilitation of this area would consist of transplant/planting native sedges, rushes, willows, and aspen. An excavator would be used to transplant mature willow clumps into the ditch restoration section.
    c. Removal of the unauthorized bridges over the Upper Little Deschutes River and rehabilitation of the stream banks.
        i. Rehabilitation of this area would consist of transplant/planting of native sedges, rushes, and willows
2. Removing encroaching lodgepole pine along the edges of the meadow to maintain the meadow habitat and within aspen stands to reduce aspen mortality and increase sprouting.
3. Redefining/resizing/rehabilitating dispersed campsites to reduce the impacts to the river and riparian areas from creep, erosion, and sedimentation. See sustainable recreation for action details.

Sustainable recreation proposed actions would provide recreational opportunities while reducing impacts to riparian and sensitive upland wildlife habitat.

1. Dispersed sites closed, redefined/resized and/or rehabilitated.
    a. Closed sites would have complete revegetation and road closed to site.
    b. Boulders, fences or other materials would be utilized to redefine or resize the sites and various unauthorized structures would be removed.
    c. Sites proposed for resizing would be pulled back from riparian areas and reduced in size due to resource or recreation impacts

[1] Oxbow: a U-shaped body of water that is an old stream channel that was originally a bend in the river but became separated when the river took a new, straighter course. Also known as an oxbow lake or meander cut-off.

   d. Mechanized equipment may be used on all sites to loosen and recontour the soil surface in order to reduce compaction and erosion, improve infiltration, and create planting sites.
   e. Native vegetation (willow stakes, aspen etc.) would be planted and native grasses utilized to re-seed areas.
   f. System roads would designated to access appropriate dispersed sites
2. Two dump sites would be cleaned up and rehabilitated.
3. Little Deschutes Cabin Interpretation
   a. Install a single panel interpretive sign near the Little Deschutes Cabin to share the history of the area and to encourage its continued stewardship. The sign would be installed near the FS 880 road for maximum visibility and require the excavation of two post-holes.

Sustainable transportation proposed actions creates a road system that provides public access throughout the planning area, provides for appropriate access to private lands, fire and emergency ingress and egress, while increasing wildlife security and reducing the resource damage, vegetation removal, and sedimentation into the river.

1. Road construction and maintenance
   a. Construct through routes and loop routes at Maintenance Level 2 for use by high-clearance vehicles (Including All Terrain Vehicles) utilizing existing roads and unauthorized to minimize ground disturbance
   b. Place roads not currently needed for management activities into storage at Maintenance Level 1 to decrease disturbance to wildlife
   c. Decommission roads no longer needed to reduce sediment into streams and/or increase core wildlife habitat
   d. Rehabilitate unauthorized roads and trails to increase core wildlife habitat, reduce sediment into streams and reduce motorized access to sensitive meadows and wetlands
   e. Add 5 turnouts on the southern section of 6125 for safety
2. Provide for access to Private Lands
   a. Utilize special use permits and road use permits for adjacent landowners depending on FS roads for access to their private lands, secondary and/or emergency ingress and egress

Project Design Features/Mitigation Measures (to be further developed)

Cultural Resources

1. Archeological or historical sites would be avoided and/or buffered and not disturbed.

Soils/Hydrology

1. Stream restoration will not take place adjacent to private land in order to avoid inundation and damage to roads and bridges.

Recreation

1. No stream structures within 30-100 yards from a popular swimming hole

Wildlife

1. No trees over 21 inches DBH would be cut in either the lodgepole removal projects or instream structures.
2. Connections to side channels with existing or created deep pools would be constructed for reconnecting during high flow only.
3. A survey, salvage/relocation plan will be developed and implemented by the Forest Service in coordination with the US Fish and Wildlife Service.
4. Just prior to hydrological restoration work implementation, the Forest Service will coordinate to survey for, and salvage/relocation of, Oregon spotted frogs in the area where work will occur in accordance with plans and permits from US Fish and Wildlife Service.